



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D <i>* : Required Field</i>

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2018-02-14
<b>Company Unique ID</b>	NL 008751171B01		
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giovanni Giacopello	<b>Representative Title</b>	ADG MD Champion
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**


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Legal Statement		
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>
		Standard

**Legal Statement**

Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STGD18N40LZT4	XLDP*IZB4A62	A	3068	2018-02-14
	Amount	UoM	Unit type	ST ECOPACK Grade
	330	mg	Each	ECOPACK1

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	6.5-6.1-2.3	3	GULL WING	
Comment	TO 252 DPAK			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	FALSE
2 - Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)	FALSE
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 15th December 2017			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.14	Die - Leadframe	433
Lead	7.04	Soft solder	21324
Antimony trioxide	1.74	Encapsulation	5273

QueryList : REACH-15th January 2018				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	XLP*1ZB4A62				6000000.0	1000000.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	11.291	mg	supplier	die	Silicon (Si)	7440-21-3		10.901	mg	965459	33033
				supplier	metallization	Aluminium (Al)	7429-90-5		0.148	mg	13108	447
				supplier	Passivation	Silicon Nitride	12033-89-5		0.035	mg	3100	106
				supplier	Passivation	Silicon Oxide	7631-86-9		0.051	mg	4517	155
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.006	mg	531	18
				supplier	back side metallization	Gold (Au)	7440-57-5		0.015	mg	1328	45
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.051	mg	4517	155
				supplier	polymer die coating	Durimide	Proprietary		0.084	mg	7440	255
Leadframe	M-004 Copper and its alloys	165.043	mg	supplier	alloy	Copper (Cu)	7440-50-8		164.729	mg	998097	499179
				supplier	alloy	Iron (Fe)	7439-89-6		0.165	mg	1000	500
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.050	mg	304	152
				supplier	metallization	Nickel (Ni)	7440-02-0		0.092	mg	557	279
				supplier	metallization	Phosphorus (P)	7723-14-0		0.007	mg	42	21
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	7.037	mg	955076	21324
Soft solder	Solder	7.368	mg	supplier	solder	Silver (Ag)	7440-22-4		0.184	mg	24973	558
				supplier	solder	Tin (Sn)	7440-31-5		0.147	mg	19951	445
				supplier	wire	Aluminium (Al)	7429-90-5		0.545	mg	996344	1652
				supplier	wire	Magnesium (Mg)	7439-95-4		0.002	mg	3656	6
Encapsulation	M-011 Other inorganic materials	144.706	mg	supplier	mold compound	Silica, vitreous	60676-86-0		116.633	mg	806000	353433
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		10.129	mg	69997	30694
				supplier	mold compound	Phenol resin	8003-35-4		5.788	mg	39998	17539
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		8.682	mg	59998	26309
				supplier	mold compound	Antimony Trioxide	1309-64-4		1.737	mg	12004	5264
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		1.013	mg	7000	3070
				supplier	mold compound	Carbon black	1333-86-4		0.724	mg	5003	2194
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167